

## REMARKS

The above amendments and these remarks are responsive to the final Office action dated November 13, 2008, and to the Advisory Action dated January 29, 2009, and support the accompanying Request for Continued Examination as a submission under 37 C.F.R. § 1.114(c). Claims 52–74 are pending in the application, with claims 56, 66, and 73 being withdrawn from consideration, prior to entry of the present amendments to the claims. This communication supersedes applicant's Response to Final Office Action, dated January 13, 2009, which we respectfully request NOT be entered, and should instead be entered relative to applicant's Response to Notice of Non-Compliant Amendment, dated July 31, 2008. In the final Office action, the Examiner rejected the pending claims as follows:

- Claim 63 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite;
- Claims 52–55, 57, 58, 62–65, 67, 68, 71, 72, and 74 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,586,985 to Putnam et al. ("Putnam") and by U.S. Patent No. 6,440,135 to Orbay et al. ("Orbay"); and
- Claims 59–61 and 69–71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Putnam or Orbay in view of U.S. Patent No. 6,383,186 to Michelson ("Michelson").

Applicant traverses the rejections, contending that all of the pending claims are definite and are patentable over the cited references. Nevertheless, to expedite the issuance of a patent, and to more particularly point out and distinctly claim aspects of the invention that applicant wants to patent now, applicant has canceled claim 63 without prejudice, and has amended claims 52–54, 62, 64, and 72. However, applicant reserves the right to pursue any of the amended claims, in original or amended form, at a later time.

Applicant also has presented arguments showing that all of the pending claims are definite and are patentable over the cited references. Accordingly, in view of the amendments above and the remarks below, applicant respectfully requests reconsideration of the application and prompt issuance of a Notice of Allowance covering all of the pending claims.

***I. Request for Continued Examination***

Applicant is submitting herewith a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114. This Request complies with the requirements of 37 C.F.R. § 1.114 as follows:

- (i) Prosecution in the application is closed, since the last Office action was a final Office action under 37 C.F.R. § 1.113.
- (ii) The Request is accompanied by a submission as set forth at 37 C.F.R. § 1.114(c), specifically, the amendments and remarks set forth herein.
- (iii) The Request is accompanied by the fee set forth at 37 C.F.R. § 1.17(e).

Accordingly, applicant respectfully requests grant of this Request for Continued Examination.

***II. Advisory Action***

The Examiner issued an Advisory Action in response to applicant's response after final Office action dated January 13, 2009. In the Advisory Action, the Examiner considered, but refused to enter, amendments to the claims presented in applicant's after-final response. In particular, the Examiner stated that applicant's amendments overcome the rejections of record but include new matter. Applicant disagrees about the alleged presence of new matter. However, applicant appreciates the Examiner's

expedited review of the after-final response and thanks the Examiner for suggested language to avoid a new matter rejection. The present communication revises the amendments to the claims presented in the response after final, generally according to the suggestions offered by the Examiner.

**III. Claim Rejection – 35 U.S.C. § 112, Second Paragraph**

The Examiner rejected claim 63 under 35 U.S.C. § 112, second paragraph, as being indefinite. More particularly, the Examiner stated that “the recitation ‘an orthogonal plane that includes the long axis of the longitudinal slot and that is oriented orthogonally to the longitudinal slot’ renders the claim vague and indefinite.” Applicant disagrees. Nevertheless, for the reasons set forth above, applicant has canceled claim 63 without prejudice, thereby rendering the Section 112 rejection moot.

**IV. Claim Rejections – 35 U.S.C. §§ 102 and 103**

The Examiner rejected each of claims 52–55, 57–65, 67–72, and 74 as being anticipated or obvious. Each of claims 52–55, 57, 58, 62–65, 67, 68, 71, 72, and 74 was rejected as being anticipated by Putnam and by Orbay. Each of claims 59–61 and 69–71 was rejected as being obvious over a combination of Putnam and Michelson and over a combination of Orbay and Michelson. Applicant traverses the rejections, contending that the cited references, taken alone or in combination, do not disclose or suggest every element of any of the rejected claims. Nevertheless, for the reasons set forth above, applicant has amended claims 52–54, 62, 64, and 72. The pending claims are patentable over the cited references for at least the reasons set forth below.

A. Claims 52–61

1. Claim 52

Independent claim 52 is directed to a method of bone fixation and, as currently amended, reads as follows:

52. (Currently Amended) A method of bone fixation, comprising:

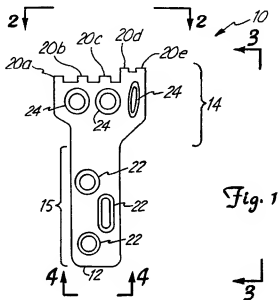
selecting a bone plate including a wider head portion connected to a narrower body portion, the bone plate defining a long axis and a longitudinal slot, the longitudinal slot defining a long axis that is at least substantially parallel to ~~extending along~~ the long axis defined by the bone plate, the bone plate also defining a plurality of openings disposed in the head portion and further defining a transverse slot disposed generally between the longitudinal slot and the plurality of openings ~~and extending transversely to the long axis~~; and

attaching the bone plate to at least one bone with fasteners received in the longitudinal slot, the plurality of openings, and the transverse slot,

wherein the bone plate has opposing inner and outer surfaces, wherein an opposing surface defines a plane, wherein the long axis defined by the longitudinal slot is included in a plane that is orthogonal to the plane defined by the opposing surface and that bisects the transverse slot.

Claim 52, as currently amended, is not anticipated by Putnam or Orbay because neither reference discloses or suggests each and every element of the currently amended claim. For example, neither reference discloses or suggests a bone plate defining a transverse slot bisected by a plane, with the plane (a) being orthogonal to a plane defined by an opposing surface of the bone plate and (b) including a long axis defined by a longitudinal slot of the bone plate. In addition, neither reference discloses or suggests “a transverse slot disposed generally between the longitudinal slot and the plurality of openings.”

Putnam relates to a method and apparatus for fixation of distal radius fractures. An embodiment of a bone plate 10 disclosed by Putnam is presented in Figure 1 of the reference, which is reproduced below to facilitate review.



Bone plate 10 defines circular holes 22, an oval hole 22, circular holes 24, and an elliptical hole 24. The bone plate also includes tines 20a-20e formed at an end of the bone plate.

In rejecting claim 52, the Examiner apparently identified elliptical hole 24 of bone plate 10 as a transverse slot. However, elliptical hole 24 is not a transverse slot as recited by currently amended claim 52, because elliptical hole 24 is not bisected (i.e., divided into two parts) by a “plane that is orthogonal” as recited in the claim. In particular, the plane that is orthogonal, in bone plate 10, does not intersect elliptical hole 24 but instead bisects a circular hole 24 of the bone plate. Also, elliptical hole 24 is not “a transverse slot disposed generally between the longitudinal slot and the plurality of openings.” In particular, elliptical hole 24 is disposed laterally of circular holes 24 in the

bone plate, instead of generally between circular holes 24 and oval hole 22. Furthermore, the gaps in the bone plate formed between pairs of tines 20a-20e do not correspond to the plurality of openings recited by claim 52 because the gaps are not used to receive fasteners that attach the bone plate to bone, as recited in claim 52.

Orbay relates to a volar fixation system with stabilization pegs. An embodiment of a bone plate 210 of the system is shown in Figures 10 and 15, which are reproduced below to facilitate review.

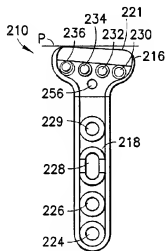


FIG.10

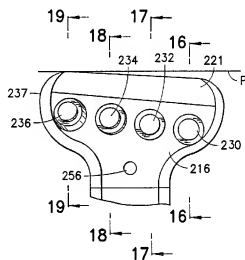


FIG.15

Bone plate 210 includes a head portion 216 extending from a body portion 218. Each of the head and body portions defines a set of circular openings for receiving pegs or screws that couple the bone plate to the radius bone. In particular, head portion 216 defines peg holes 230-236 for receiving pegs, and body portion 218 defines screw holes 224, 226, 228, and 229 for receiving bone screws. One of the screw holes, namely, screw hole 228, has an oval configuration.

In rejecting claim 52, the Examiner identified peg hole 236 of Orbay's bone plate 210 as a transverse slot. However, peg hole 236 is not a transverse slot as recited by currently amended claim 52 because peg hole 236 is not bisected by a "plane that is orthogonal" as recited in the claim. In particular, the plane that is orthogonal, in bone plate 210, does not intersect peg hole 236 but instead extends between peg holes 232 and 234. Also, peg hole 236 is not "a transverse slot disposed generally between the longitudinal slot and the plurality of openings." In particular, peg hole 236 is disposed laterally of peg holes 230-234 in the bone plate, instead of generally between peg holes 230-234 and oval screw hole 228.

Michelson relates to a single-lock skeletal plating system and was cited against other claims in combination with Putnam or Orbay. However, Michelson does not cure the defects in Putnam and Orbay described above.

In summary, for at least the reasons presented above, claim 52 is patentable over the cited references taken alone or in combination. Claim 52 thus should be allowed. Claims 53-61, which depend from independent claim 52, also should be allowed for at least the same reasons as claim 52.

## 2. Claim 53

Claim 53, as currently amended, recites "wherein the step of selecting a bone plate includes a step of selecting a bone plate including a transverse slot having opposing sides that each extend to opposing ends of the transverse slot, wherein the transverse slot extends along a path defined centrally between the opposing sides, and wherein an orthogonal projection of the path onto the plane defined by the opposing surface is arcuate." None of the cited references discloses or suggests such a

transverse slot that extends along a path having an orthogonal projection that is arcuate. For example, elliptical hole 24 of Putnam and peg hole 236 of Orbay each extend along a path having an orthogonal projection that is linear. Accordingly, claim 53 also should be allowed not only for depending from allowable claim 52 but also for these additional reasons.

B. Claims 62–71

Independent claim 62 is directed to a method of bone fixation and, as currently amended, reads as follows:

62. (Currently Amended) A method of bone fixation, comprising:  
selecting a bone plate defining a long axis and a longitudinal slot, the longitudinal slot defining a long axis that is at least substantially parallel to extending along the long axis defined by the bone plate, the bone plate also defining a plurality of openings and further defining a transverse slot disposed generally between the longitudinal slot and the plurality of openings ~~and extending transversely to the long axis along an arcuate path~~; and  
attaching the bone plate to at least one bone with fasteners received in the longitudinal slot, the plurality of openings, and the transverse slot,  
wherein the bone plate has opposing inner and outer surfaces, wherein an opposing surface defines a plane, wherein the long axis defined by the longitudinal slot is included in a plane that is orthogonal to the plane defined by the opposing surface and that bisects the transverse slot,  
wherein the transverse slot has opposing sides that each extend to opposing ends of the transverse slot, wherein the transverse slot extends along a path defined centrally between the opposing sides, and wherein an orthogonal projection of the path onto the plane defined by the opposing surface is arcuate.



Claim 62 is patentable over the cited references because the references, taken alone or in combination, do not disclose or suggest every element of the claim. For example, and for the reasons presented above for claim 52, the references do not disclose or suggest (1) a bone plate defining a transverse slot bisected by a plane, with the plane (a) being orthogonal to a plane defined by an opposing surface of the bone plate and (b) including a long axis defined by a longitudinal slot of the bone plate, or (2) “a transverse slot disposed generally between the longitudinal slot and the plurality of openings.” Also, for the reasons presented above for claim 53, the cited references do not disclose or suggest “the transverse slot extends along a path defined centrally between the opposing sides [of the transverse slot], and wherein an orthogonal projection of the path onto the plane defined by the opposing surface is arcuate.” Therefore, for at least these reasons, claim 62 should be allowed. Claims 64–71, which depend from claim 62, also should be allowed for at least the same reasons as claim 62.

C. Claims 72–74

Independent claim 72 is directed to a method of bone fixation and, as currently amended, reads as follows:

72. (Currently Amended) A method of bone fixation, comprising:  
selecting a bone plate defining a long axis<sub>1</sub> and a first opening<sub>1</sub>, the bone plate also defining a first opening<sub>1</sub>, a plurality of second openings<sub>1</sub> and further defining a transverse slot disposed generally between the first opening and the plurality of second openings and extending transversely to the long axis along an arcuate path; and

attaching the bone plate to at least one bone with fasteners received in the first opening, the plurality of second openings, and the transverse slot,

wherein the bone plate has opposing inner and outer surfaces, wherein an opposing surface defines a plane, wherein the long axis defined by the longitudinal slot is included in a plane that is orthogonal to the plane defined by the opposing surface and that bisects the transverse slot,

wherein the transverse slot has opposing sides that each extend to opposing ends of the transverse slot, wherein the transverse slot extends along a path defined centrally between the opposing sides, and wherein an orthogonal projection of the path onto the plane defined by the opposing surface is arcuate.

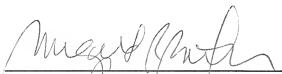
Claim 72 is patentable over the cited references because the references do not disclose or suggest every element of the currently amended claim. For example, and for at least similar reasons to those presented above for claim 52, the references do not disclose or suggest a bone plate defining a transverse slot bisected by a plane, with the plane (a) being orthogonal to a plane defined by an opposing surface of the bone plate and (b) including a long axis defined by the bone plate and intersecting the first opening. In addition, the cited references do not disclose or suggest “a transverse slot disposed generally between the longitudinal slot and the plurality of openings.” Also, for the same reasons as claim 53 presented above, the references do not disclose or suggest “the transverse slot extends along a path defined centrally between the opposing sides [of the transverse slot], and wherein an orthogonal projection of the path onto the plane defined by the opposing surface is arcuate.” Therefore, for at least these reasons, claim 72 should be allowed. Claims 73 and 74, which depend from claim 72, also should be allowed for at least the same reasons as claim 72.

V. Conclusion

Applicant believes that the present communication fully addresses all matters raised by the Examiner in the Office action and that all of the pending claims are patentable over the cited references. Accordingly, applicant respectfully requests that the Examiner issue a Notice of Allowance covering all of the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record, or his associate, Stan Hollenberg (Reg. No. 47,658), both at (503) 224-6655.

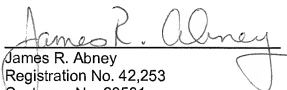
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